

IN THE CLAIMS:

Please re-write the claims as follows:

- 1 1. (Original) A method for initiating a peer-to-peer communication session, the method
2 comprising the steps of:
3 attempting a first remote direct memory access (RDMA) read operation directed
4 to a cluster partner;
5 performing, in response to a successful first RDMA read operation, a first RDMA
6 write operation to the cluster partner;
7 performing, in response to a successful RDMA write operation, a second RDMA
8 read operation directed to the cluster partner; and
9 performing, in response to a successful second RDMA read operation, a second
10 RDMA write operation to the cluster partner.
- 1 2. (Original) The method of claim 1 wherein the step of attempting a first RDMA read
2 operation further comprises the step of issuing a RDMA read operation to the cluster
3 partner requesting a pre-set memory address location that is associated with a status
4 variable on the cluster partner.
- 1 3. (Original) The method of claim 1 further comprising the steps of:
2 exchanging a set of peer connection information;
3 passing a set of client information to the cluster partner;
4 creating a set of appropriate communication ports;
5 alerting the cluster partner of a ready status; and
6 alerting a set of clients that the cluster partner is in a ready state.
- 1 4. (Original) The method of claim 3 wherein the set of peer connection information
2 comprises a version number.

- 1 5. (Original) The method of claim 1 wherein the step of passing a set of client
2 information to the cluster partner further comprises the steps of:
3 collecting, from a set of clients, the set of client information; and
4 transferring the collected set of client information to the cluster partner.
- 1 6. (Original) The method of claim 5 wherein the client information comprises a number
2 of communication ports required.
- 1 7. (Original) The method of claim 5 wherein the set of client information further
2 comprises an amount of memory requested by a particular client.
- 1 8. (Original) The method of claim 1 wherein the cluster partner is a storage system.
- 1 9. (Original) The method of claim 1 wherein the cluster partner is an application server.
- 1 10. (Original) A storage operating system, executing on a storage system, the storage
2 operating system comprising:
3 a cluster connection manager adapted to initiate a peer to peer communication
4 session with a cluster partner upon initialization of the storage operating system.
- 1 11. (Original) The storage operating system of claim 10 wherein the cluster connection
2 manager further comprises:
3 means for performing a remote first direct memory access (RDMA) read
4 operation directed to a cluster partner;
5 means for performing, in response to a successful first RDMA read operation, a
6 first RDMA write operation to the cluster partner;
7 means for performing, in response to a successful first RDMA write operation, a
8 second RDMA read operation directed to the cluster partner; and
9 means for performing, in response to a successful second RDMA read operation,
10 a second RDMA write operation to the cluster partner.

1 12. (Original) The storage operating system of claim 11 wherein the cluster connection
2 manager further comprises:

- 3 means for exchanging a set of peer connection information;
4 means for passing a set of client information to the cluster partner;
5 means for creating a set of appropriate communication ports;
6 means for alerting the cluster partner of a ready status; and
7 means for alerting a set of clients that the cluster partner is in a ready state.

1 13. (Original) A method for initiating a peer-to-peer communication session, the method
2 comprising the steps of:

- 3 performing a first remote direct memory access read operation directed to a
4 cluster partner; and
5 performing, in response to a successful first remote direct memory access read
6 operation, a first remote direct memory access write operation to the cluster partner.

1 14. (Original) The method of claim 13 wherein the first remote direct memory access
2 read operation is performed over a Virtual Interface connection having a pre-determined
3 and pre-assigned Virtual Interface Number and a pre-determined Fibre Channel ID.

1 15. (Currently Amended) A method for initiating a peer-to-peer communication
2 session, the method comprising the steps of:

- 3 (a) attempting a first remote direct memory access read operation directed to a
4 predefined hardware address and a predefined port number; and
5 (b) performing, in response to a successful step (a), a first remote direct memory
6 access write operation directed to the predefined hardware address and the predefined
7 port number.

1 16. (Currently Amended) The method of claim 15 ~~16~~ further comprising the step of:

- 2 (c) performing, in response to a successful step (b), a second remote direct
3 memory access read operation directed to the predefined hardware address and the
4 predefined port number.

- 1 17. (Original) The method of claim 15 wherein the predefined hardware address
2 comprises a fibre channel identifier.
- 1 18. (Original) The method of claim 15 wherein the predefined port number comprises a
2 virtual interface.
- 1 19. (Original) The method of claim 15 wherein the first remote direct memory access is
2 delivered to a predefined memory address storing booting status information.
- 1 20. (Original) A system configured to establish reliable peer-to-peer communication
2 among storage systems of a clustered environment, the system comprising:
3 a peer process executing on each storage system partner; and
4 a cluster connection manager executing on each storage system partner, the
5 cluster connection manager establishing a reliable peer-to-peer connection between each
6 peer process by connecting to a predetermined port number using a predetermined
7 network address.
- 1 21. (Original) The system of claim 20 wherein the reliable peer-to-peer connection is
2 established without requiring a storage operating system executing on each storage
3 system partner to be fully functioning.
- 1 22. (Original) The system of claim 20 wherein the peer-to-peer connection is a virtual
2 interface connection.
- 1 23. (Original) The system of claim 20 wherein the peer process is a cluster connection
2 client that requests services from the cluster connection manager.

Please add the following new claims 24 *et seq.*:

1 24. (New) A system configured to open an initial peer-to-peer connection over a
2 cluster interconnect, the system comprising:
3 a storage system;
4 a cluster connection manager executing on the storage system, the cluster
5 connection manager configured to establish a peer connection on a predetermined port
6 number and using a predetermined network address within the storage system; and
7 a process executing on the storage system, the process configured to use the
8 established peer connection for communication.

1 25. (New) The system of claim 24 wherein the peer-to-peer connection is a virtual
2 interface connection.

1 26. (New) The system of claim 24 wherein the process executing on the storage
2 system is a cluster connection client that requests services from the cluster connection
3 manager.

1 27. (New) The system of claim 24 wherein the process executing on the storage
2 system communicates with a cluster partner using the established peer connection.

1 28. (New) A system configured to accept the initiation of a peer-to-peer connection
2 over a cluster interconnect, the system comprising:
3 a storage system;
4 a cluster connection manager executing on the storage system, the cluster
5 connection manager configured to accept a peer connection on a predetermined port
6 number and using a predetermined network address within the storage system; and
7 a process executing on the storage system, the process configured to read
8 information from the established peer connection.

1 29. (New) The system of claim 28 wherein the peer-to-peer connection is a virtual
2 interface connection.

1 30. (New) The system of claim 28 wherein the process executing on the storage
2 system is a cluster connection client that requests services from the cluster connection
3 manager.

1 31. (New) The system of claim 28 wherein the process executing on the storage
2 system reads information from a cluster partner.

1 32. (New) The system of claim 28 wherein the information comprises heartbeat
2 signals.